

Application No. 10/674,403
Amendment dated December 22, 2006
Reply to Office Action of September 22, 2006

Docket No.: 0941-0845P

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A fluid analyzing apparatus for sequentially analyzing a multiplex fluid sample, comprising:

a first unit having a fluid inlet, a first upper portion and a fluid outlet, wherein the first upper portion is formed on the lower part of the first unit, the multiplex fluid sample flowing into the fluid analyzing apparatus via the fluid inlet and flowing out of the fluid analyzing apparatus via the fluid outlet;

a second unit disposed under the first unit and having a pipeline, a first lower portion and a second upper portion, wherein the first lower portion is formed on the upper part of the second unit and corresponds to the first upper portion to combine the first upper portion to form a first target chamber, the second upper portion is formed on the lower part of the second unit, and the pipeline is sequentially connected to the fluid inlet, first lower portion, second upper portion and fluid outlet;

a third unit disposed under the second unit and having a second lower portion, wherein the second lower portion is formed on the upper part of the third unit and corresponds to the second upper portion to combine the second upper portion to form a second target chamber;

a first sealing element disposed between the first upper portion and the first lower portion to prevent leakage of the multiplex fluid sample from the first target chamber;

a second sealing element disposed between the second upper portion and the second lower portion to prevent leakage of the multiplex fluid sample from the second target chamber;

a first analyzing element disposed in the first target chamber to analyze and detect the multiplex fluid sample; and

Application No. 10/674,403
Amendment dated December 22, 2006
Reply to Office Action of September 22, 2006

Docket No.: 0941-0845P

a second analyzing element disposed in the second target chamber to analyze and detect the multiplex fluid sample.

2. (Original) The fluid analyzing apparatus as claimed in claim 1, wherein the pipeline of the second unit is sequentially connected to the fluid inlet, first lower portion, second upper portion and fluid outlet with an inclined angle.

3-4. (Cancelled)

5. (Original) The fluid analyzing apparatus as claimed in claim 1, wherein the first analyzing element further comprises a first signal connecting portion extending out of the fluid analyzing apparatus.

6. (Original) The fluid analyzing apparatus as claimed in claim 1, wherein the second analyzing element further comprises a second signal connecting portion extending out of the fluid analyzing apparatus.

7. (Original) The fluid analyzing apparatus as claimed in claim 1, wherein the first and second analyzing elements are physical or/and biological or/and chemical sensing elements.

8. (Original) The fluid analyzing apparatus as claimed in claim 7, wherein the physical sensing element is an electrode, a quartz crystal microbalance (QCM), a flexural plate wave

Application No. 10/674,403
Amendment dated December 22, 2006
Reply to Office Action of September 22, 2006

Docket No.: 0941-0845P

(FPW) device, a thermal sensing element, a pressure sensing element, an optical sensing element or a viscosity sensing element.

9. (Original) The fluid analyzing apparatus as claimed in claim 7, wherein the biological sensing element is a nucleic acid, protein, antibody, enzyme, microorganism or other biochemical substances.

10. (Original) The fluid analyzing apparatus as claimed in claim 1, further comprising at least one bolt to combine the first, second and third units.

11. (Original) The fluid analyzing apparatus as claimed in claim 1, wherein the first, second and third units are composed of acrylic, Teflon or glass.

12. (Original) The fluid analyzing apparatus as claimed in claim 1, further comprising a pump to pump the multiplex fluid sample into the fluid analyzing apparatus.

13. (Original) The fluid analyzing apparatus as claimed in claim 1, wherein the multiplex fluid sample is respectively analyzed or detected by the first and second analyzing elements.

14-27. (Cancelled)